CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/936,845A

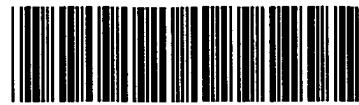CRF Processing Date: 4/2/02
Edited by: ____
Verified by: ____ (STIC staff)

H-9

ENTERED

- [ ] Changed a file from non-ASCII to ASCII

- [ ] Changed the margins in cases where the sequence text was "wrapped" down to the next line.

- [ ] Edited a format error in the Current Application Data section, specifically: _____

- [ ] Edited the Current Application Data section with the actual current number. The number inputted by the applicant was [ ] the prior application data; or [ ] other _____ .

- [ ] Added the mandatory heading and subheadings for "Current Application Data".

- [ ] Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

- [ ] Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____

- [ ] Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____

- [ ] Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____

- [ ] Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

- [ ] Inserted colons after headings/subheadings. Headings edited included: _____

- [ ] Deleted extra, invalid, headings used by an applicant, specifically: _____

- [x] Deleted: [x] non-ASCII "garbage" at the beginning/end of files; [ ] secretary initials/filename at end of file; [ ] page numbers throughout text; [ ] other invalid text, such as_____ .

- [ ] Inserted mandatory headings, specifically: _____

- [ ] Corrected an obvious error in the response, specifically: _____

- [ ] Edited identifiers where upper case is used but lower case is required, or vice versa.

- [ ] Corrected an error in the Number of Sequences field, specifically: _____

- [ ] A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

- [ ] Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

- [ ] Other: _____
_____
_____

*Examiner: The above corrections must be communicated to the applicant in th first Office Action. DO NOT send a copy of this form.

3/1/95

PCT09

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/936,845A

DATE: 04/02/2002 P.5
TIME: 13:01:25

Input Set : **A:\PTO.DC.txt**
Output Set: **N:\CRF3\04022002\I936845A.raw**

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   3 <110> APPLICANT: Napier, Johnathan A.
   5 <120> TITLE OF INVENTION: Polyunsaturated Fatty Acid (PUFA) Elongase from
Caenorhabditis elegans
   7 <130> FILE REFERENCE: 76/7
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/936,845A
C--> 10 <141> CURRENT FILING DATE: 2002-03-06
  12 <160> NUMBER OF SEQ ID NOS: 22
  14 <170> SOFTWARE: PatentIn Ver. 2.1
  16 <210> SEQ ID NO: 1
  17 <211> LENGTH: 27
  18 <212> TYPE: DNA
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  26 <211> LENGTH: 27
  27 <212> TYPE: DNA
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  30 <400> SEQUENCE: 2
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  36 <212> TYPE: DNA
  37 <213> ORGANISM: C. elegans
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  44 <211> LENGTH: 27
  45 <212> TYPE: DNA
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  53 <211> LENGTH: 29
  54 <212> TYPE: DNA
  55 <213> ORGANISM: C. elegans
  57 <400> SEQUENCE: 5
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  64 <213> ORGANISM: C. elegans
  66 <400> SEQUENCE: 6
  67 gcggagctcc tactcttcct tgggacg                              27
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RAW SEQUENCE LISTING   DATE: 04/02/2002
PATENT APPLICATION: US/09/936,845A   TIME: 13:01:25

Input Set : **A:\PTO.DC.txt**
Output Set: **N:\CRF3\04022002\I936845A.raw**

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73 <213> ORGANISM: C. elegans
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77 acagatatga ccacaaaata caaatattca tatcacttcc caggtgaaca ggtggcggat 120
78 ccgcagtatt ggacgatttt attccagaaa tattggtatc attcgatcac aatatcagtt 180
79 ctttatttca ttttaattaa ggtgattcaa aagtttatgg agaatcgaaa accattcact 240
80 ttgaaatacc cattgattct ttggaatgga gctcttgcag cattcagtat aattgccaca 300
81 ttgcggttct ctattgatcc tctacgatca ctatatgctg aaggattcta caaaactctg 360
82 tgctattcgt gtaatccaac tgatgtggct gcattttgga gctttgcatt cgctctttcc 420
83 aagattgttg aacttggaga cactatgttc attattttga gaaaacggcc attgatcttt 480
84 ttacactact atcatcatgc agcagtgtta atctacactg tccattctgg tgccgagcat 540
85 actgcagctg gtcgtttcta catcctaatg aactacttcg cacattctct catgtatact 600
86 tactacacag tttctgccat gggatacaga ttaccgaaat gggtatcaat gactgtcaca 660
87 actgttcaaa caactcaaat gttagctgga gtcggaataa cttggatggt gtacaaagtg 720
88 aaaactgaat acaagcttcc ttgtcaacaa tccgtagcca atttgtatct cgcattcgtc 780
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94 <211> LENGTH: 1308
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96 <213> ORGANISM: C. elegans
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101 tcaattacag catctgtcgt gtatgtagcc gtcattttta caggaaagaa ggtggttctc 180
102 atctacaaaa aatcacgagt tattacttttt gagtctagcc ttcagaatgc aattaagaat 240
103 cgaaaccgaa aatcacttaa tagttctcaa atgtttcaga ttatggaaaa gtacaagccc 300
104 ttccaactgg acacaccact cttcgtctgg aattcatttt tagccatttt ctcaattctc 360
105 gggttcctcc gaatgacacc tgaatttgta tggagttggt cagcagaagg aaactcattc 420
106 aaatattcaa tttgtcattc atcttatgct caaggagtca ctggtttctg gactgaacaa 480
107 ttcgcaatga gcaaactttt cgagctcatc gacacaatct tcatcgttct tcgtaaacgt 540
108 ccactcatct tccttcactg gtatcatcat gtaactgtta tgatctacac atggcacgcg 600
109 tacaaggatc acactgcatc aggacggtgg ttcatttgga tgaattatgg agttcatgct 660
110 cttatgtatt cctactatgc tcttcgttct ctgaaattcc gtcttccaaa acaaatggca 720
111 atggttgtta ctactctcca acttgctcaa atggttatgg gagtaatcat cggagtcact 780
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114 gttaagaaaa acaaccgtac agtaaattat gaaaataatt caaaaaattt ccccgatctc 960
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116 aataattata aaattcaatt ttcatcaaat tttgttaatg ttgatggaaa aaaacataag 1080
117 aaaacatatg aacttattct tccaagaaga aaaatgacca caattttaac ttttctattt 1140
118 ggaaaaaatc gaattttttc gaaatatcag aaaaatcgaa aaaacatttc gattcctgtt 1200
119 gatttcgaaa ttctggagcc aaaagaagat atcaatgcta acatcgctga gccatccatc 1260
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123 <210> SEQ ID NO: 9
124 <211> LENGTH: 825
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RAW SEQUENCE LISTING　　　　　　　DATE: 04/02/2002
PATENT APPLICATION:　US/09/936,845A　　TIME: 13:01:25

Input Set : A:\PTO.DC.txt
Output Set: N:\CRF3\04022002\I936845A.raw

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126 <213> ORGANISM: C. elegans
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130 agtctggatc agactgattc ttacatgtct acatttgtac cattatccta taaaatcatg 120
131 attggttatc tcgtcaccat ctacttcggg caaaaattaa tggctcacag aaaaccattc 180
132 gatctccaaa atacacttgc tctctggaac ttcgggtttt cactgttctc gggaatcgcc 240
133 gcctataagc ttattccaga actattcgga gttttcatga aggacgggtt tgtcgcttcc 300
134 tactgtcaaa acgagaacta ctacaccgat gcatcaactg gattctgggg ctgggccttt 360
135 gtgatgtcga aagctccaga actaggggat actatgttct tggtccttcg taaaaaacca 420
136 gttatcttca tgcactggta tcatcatgcc ctcacatttg tctacgcagt agtcacatac 480
137 tctgagcatc aggcatgggc tcgttggtct ttggctctca accttgccgt ccacactgtt 540
138 atgtatttct acttcgccgt tcgcgccttg aacatccaaa ctccacgccc agtggcaaag 600
139 ttcatcacta ctattcaaat tgtccaattt gtcatctcat gctacatttt tgggcatttg 660
140 gtattcatta agtctgctga ttctgttcct ggttgcgctg ttagctggaa tgtgctatcg 720
141 atcggaggac tcatgtacat cagttatttg ttcctttttg ccaagttctt ctacaaggcc 780
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153 cttgccgtcg gatatattgc cactattttt ggactgaaat attatatgaa agaccgaaaa 180
154 gccttcgatc tcagtactcc attaaacatt tggaatggta ttctttcgac attcagctta 240
155 ttgggattct tattcacttt tcctactttg ttatcagtta tcagaaagga tggatttagt 300
156 cacacctatt cccatgtctc tgagctttac actgacagta cctctggata ttggatcttc 360
157 ctttgggtta tctcaaagat tccggaactt ttggatacag tattcattgt tcttcgcaag 420
158 agaccactta ttttcatgca ctggtaccat cacgcattga ccggttacta tgctcttgtc 480
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160 gcattcatgt atggatacta tcttctgaaa tctctgaaag ttccaattcc accatcagtt 600
161 gctcaagcaa tcaccacatc tcaaatggtt caattcgcag ttgccatttt cgcacaagtt 660
162 catgtttcct ataaacacta tgttgaggga gttgaaggat tagcctactc gttcagagga 720
163 acagctatcg gattttttcat gcttactacc tacttctatc tatggattca attctacaaa 780
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168 <210> SEQ ID NO: 11
169 <211> LENGTH: 825
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171 <213> ORGANISM: C. elegans
173 <400> SEQUENCE: 11
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175 ctctcaaaaa agcatattgc acagactcag tatgctgctt tctggatctc aatggcatat 120
176 gttgtcgtta tttttgggct caaggctgtc atgacaaacc gaaaaccatt tgatctcacg 180
177 ggaccactga atctctggaa tgcgggtctt gctattttct caactctcgg atcacttgcc 240
178 actacatttg gacttctcca cgagttcttc agccgtggat ttttcgaatc ttacattcac 300
179 atcggagact tttataatgg actttctgga atgttcacat ggcttttcgt tctctcaaaa 360
180 gttgctgaat tcggagatac acttttttatt attcttcgta aaaagccatt gatgttcctt 420
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RAW SEQUENCE LISTING   DATE: 04/02/2002
PATENT APPLICATION: US/09/936,845A   TIME: 13:01:25

Input Set : **A:\PTO.DC.txt**
Output Set: **N:\CRF3\04022002\I936845A.raw**

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181 cattggtatc atcatgtgct tacaatgaat tatgctttta tgtcatttga agctaatttg 480
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183 tatatgcttc gttcttttgg tgtcaaggtt ccagcatgga ttgccaagaa tattacaaca 600
184 atgcaaattc ttcaattcgt tattactcat ttcattcttt tccacgttgg atatttggca 660
185 gttactggac aatctgttga ctcaactcca ggatattatt ggttctgcct tctcatggaa 720
186 atctcttatg tcgttctgtt cggaaacttc tactatcaat catacatcaa gggaggtggc 780
187 aagaagttta atgcagagaa gaagactgaa aagaaaattg aataa        825
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198 gaattgtgga gtcttttaac gaatcaggat gaagttttcc cgcatattag agcacggcga 180
199 ttcattcaag aacattttgg tctattcgtc cagatggcaa ttgcatatgt cattttggtg 240
200 ttctcaatca aaaggttcat gagggatcgt gaaccatttc aactcaccac agctcttcgt 300
201 ctctggaact tcttcctctc cgtcttctca atttatggtt cctggacaat gtttccattt 360
202 atggttcaac aaataagact ttatggtctc tacggatgtg gatgcgaagc actttcaaac 420
203 cttccgagtc aagcagaata ttggcttttc ctgacgatct tgtccaaagc tgtggagttt 480
204 gttgatacat ttttcttggt tctccggaaa aaaccactca tcttcctaca ctggtatcat 540
205 catatggcaa catttgtctt cttctgcagt aattacccga ctccatcgtc acaatcacgc 600
206 gtcggagtta tcgtcaacct gttcgtgcat gccttcatgt acccatacta tttcacccga 660
207 tcaatgaaca tcaaagttcc tgcgaaaatt tcaatggctg ttacagttct tcaattgact 720
208 caattcatgt gctttatcta tggatgtact ctcatgtact actcgttggc cactaatcag 780
209 gcacgatacc cctcaaatac acctgcgaca ctccaatgtt tgtcctacac tctacatttg 840
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216 <213> ORGANISM: C. elegans
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221 gctgatcact ttgatgttac tattcaggct tcaatcctgt acatggtcgt tgtgttcgga 180
222 acaaaatggt tcatgcgtaa tcgtcaacca ttccaattga ctattccact caacatctgg 240
223 aatttcatcc tcgccgcatt ttccatcgca ggagctgtca aaatgacccc agagttcttt 300
224 ggaaccattg ccaacaaagg aattgtcgat cctactgcaa agtgtttgat ttcacgaaag 360
225 gagagaatgg atactgggtg tggctcttca tggcttccaa acttttcgaa cttgttgaca 420
226 ccatcttctt ggttctccgt aaacgtccac tcatgttcct tcactggtat caccatattc 480
227 tcaccatgat ctacgcctgg tactctcatc cattgacccc aggattcaac agatacggaa 540
228 tttatcttaa ctttgtcgtc cacgccttca tgtactctta ctacttcctt cgctcgatga 600
229 agattcgcgt gccaggattc atcgcccaag ctatcacatc tcttcaaatc gttcaattca 660
230 tcatctcttg cgccgttctt gctcatcttg gttatctcat gcacttcacc aatgccaact 720
231 gtgatttcga gccatcagta ttcaagctcg cagtttttcat ggacacaaca tacttggctc 780
232 ttttcgtcaa cttcttcctc caatcatatg ttctccgcgg aggaaaagac aagtacaagg 840
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237 <211> LENGTH: 801
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244 ctgcttatat tattgcgaca aatttattac agagatatat ggagtcacgg aaacctaaaa 180
245 cttttactag catggaacgg ttttttggca gtgttcagta ttatgggtac atggagattt 240
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247 gtaaatccac gttcaccgtc cgcattctgg gcatgcatgt tcgctctatc gaaaatcgcc 360
248 gagtttgggg acacgatgtt cttggtgctg aggaaacggc cggttatatt ccttcactgg 420
249 tatcatcacg ctgttgttct gatcctttct tggcatgctg caatcgaact cacagctcca 480
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251 ataacatcaa tcggctatcg tcttcccaaa atcgtttcaa tgactgttac attccttcaa 600
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253 ggagagatgt gccaacaatc ctacgacaat ctggcgttga gcttcggaat ctacgcctca 720
254 ttcctggtgc tattctccag tttcttcaac aatgcatatt tggtaaaaaa ggacaagaaa 780
255 cccgatgtga agaaggatta a                                        801
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260 <212> TYPE: PRT
261 <213> ORGANISM: C. elegans
263 <400> SEQUENCE: 15
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267 Gly Pro Asn His Thr Asp Met Thr Thr Lys Tyr Lys Tyr Ser Tyr His
268             20                  25                  30
270 Phe Pro Gly Glu Gln Val Ala Asp Pro Gln Tyr Trp Thr Ile Leu Phe
271         35                  40                  45
273 Gln Lys Tyr Trp Tyr His Ser Ile Thr Ile Ser Val Leu Tyr Phe Ile
274     50                  55                  60
276 Leu Ile Lys Val Ile Gln Lys Phe Met Glu Asn Arg Lys Pro Phe Thr
277 65                  70                  75                  80
279 Leu Lys Tyr Pro Leu Ile Leu Trp Asn Gly Ala Leu Ala Ala Phe Ser
280                 85                  90                  95
282 Ile Ile Ala Thr Leu Arg Phe Ser Ile Asp Pro Leu Arg Ser Leu Tyr
283             100                 105                 110
285 Ala Glu Gly Phe Tyr Lys Thr Leu Cys Tyr Ser Cys Asn Pro Thr Asp
286             115                 120                 125
288 Val Ala Ala Phe Trp Ser Phe Ala Phe Ala Leu Ser Lys Ile Val Glu
289     130                 135                 140
291 Leu Gly Asp Thr Met Phe Ile Ile Leu Arg Lys Arg Pro Leu Ile Phe
292 145                 150                 155                 160
294 Leu His Tyr Tyr His His Ala Ala Val Leu Ile Tyr Thr Val His Ser
295             165                 170                 175
297 Gly Ala Glu His Thr Ala Ala Gly Arg Phe Tyr Ile Leu Met Asn Tyr
298             180                 185                 190
300 Phe Ala His Ser Leu Met Tyr Thr Tyr Tyr Thr Val Ser Ala Met Gly
301             195                 200                 205
303 Tyr Arg Leu Pro Lys Trp Val Ser Met Thr Val Thr Thr Val Gln Thr
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Use of n and / or Xaa has been detected in the
Sequence Listing. Review the Sequence Listing
→ to ensure a corresponding explanation is present
in the <220> to <223> fields of each sequence
using n or Xaa.

VERIFICATION SUMMARY   DATE: 04/02/2002
PATENT APPLICATION: US/09/936,845A   TIME: 13:01:26

Input Set : A:\PTO.DC.txt
Output Set: N:\CRF3\04022002\I936845A.raw

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L:9 M:270 C: Current Application Number differs, Replaced Current Application Number
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:748 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:754 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:757 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:772 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
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